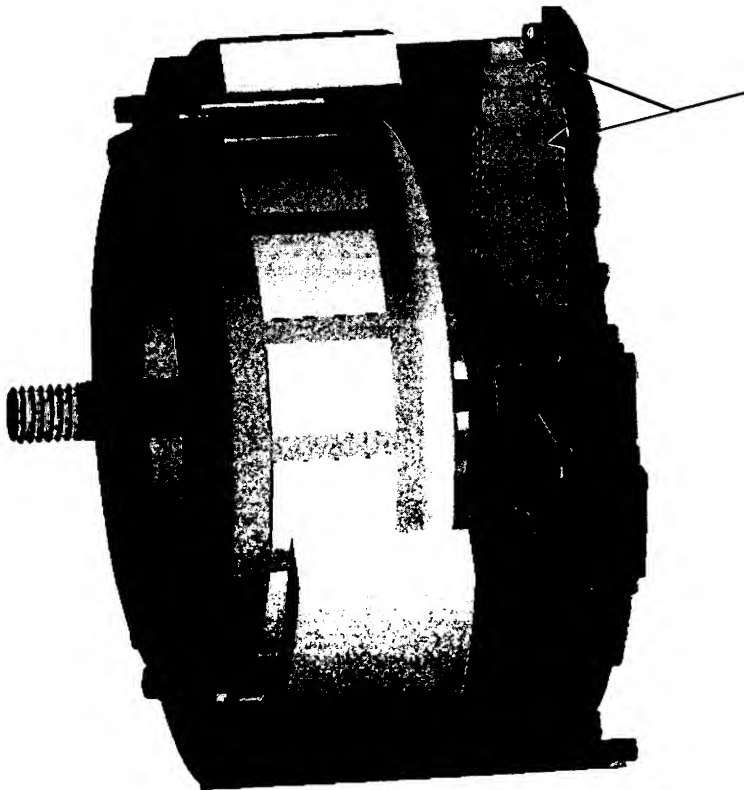


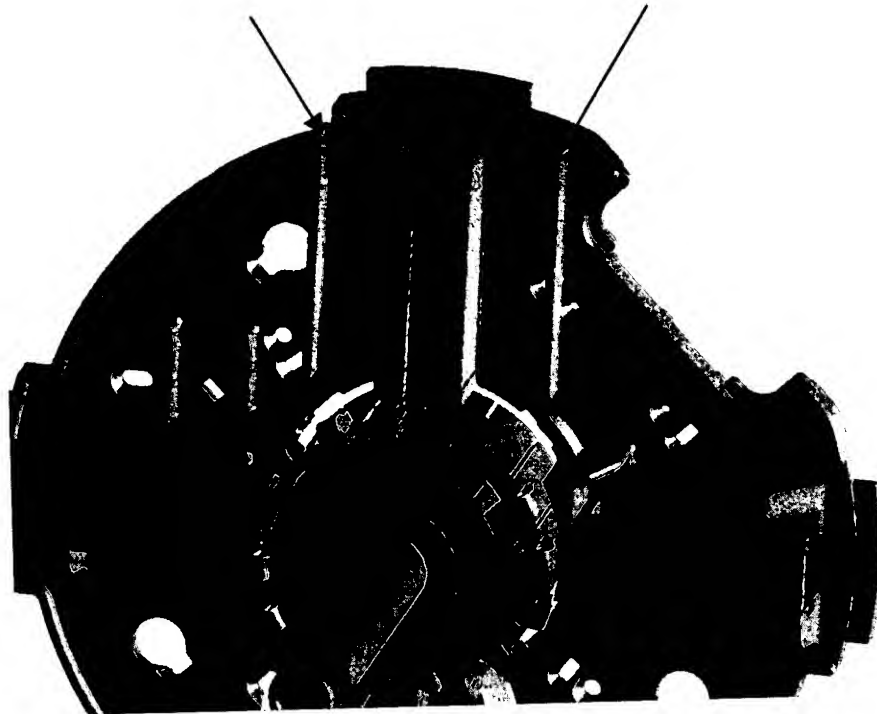
REMARKS

In paragraph 1 of the Office Action, the Examiner objected to claim 7 due to various informalities. Applicants have amended claim 7 as shown and believe it is now in good form. Applicants also point out that the same or similar changes to form were made to claim 15. Applicants wish to thank the Examiner for the helpful suggestions.

In paragraph 2 and 3 of the Office Action the Examiner rejected 1-23 and 25 under 35 USC §102(a) as being anticipated by Autret et al. (6,229,242) and further rejected claim 24 under 35 USC §103(a) as being unpatentable over Autret et al. In view of the claims as now presented and for the reasons discussed below, Applicants respectfully submit that the claims are now in condition for allowance and are neither anticipated nor made obvious in view of Autret et al.

Autret et al. discloses an electric motor brush comprising a housing for a brush and a flat metal base plate and a cover plate formed by separate pieces and defining the housing. For the Examiner's convenience, the following is a computer model, as understood by Applicants, of the Autret et al. device:





In contrast, Applicants' independent claims have been amended to recite that the brush box comprises at least one heat sink fin oriented substantially parallel to a direction of air flow around the plurality of brush boxes. One embodiment of this invention is shown in Applicants' Fig. 5. Notice that one or more of the fins are elongated and oriented substantially parallel to the direction of airflow around the brush boxes. Applicants have found that this arrangement facilitates minimizing airflow drag and maximizing heat exchange between a fin and the surrounding airflow.

Moreover, when Applicants' fins are arranged to extend above a top surface of the brush box, as covered in dependent claims 3, 11 and 19, they are in a better position to be exposed to the airflow, although this position is not mandatory to realize the benefits of Applicants' invention.

Applicants have amended the independent claims 1, 9 and 17 to reflect that the heat sink comprises at least one heat sink fin oriented substantially parallel to a direction of air flow around the plurality of brush boxes for dissipating heat generated by the brushes to lower a brush temperature. Applicants respectfully submit that neither Aultret et al. nor any of the other references, whether taken alone or combination, anticipate or make obvious the invention as now claimed. For all the foregoing reasons, it is believed that these claims are now in condition for allowance and such allowance is respectfully requested.

Claims 3-8, 10-16 and 18-25 depend, either directly or indirectly, from claims 1, 9 and 17, respectively, and contain limitations in addition to the limitations of their respective base claims. Accordingly, Applicants respectfully submit that these claims are also in condition for allowance.

Inasmuch as no period for reply was specified in the Office Action, it is understood that the maximum statutory period applies and expires six months from the date of mailing of the Office Action and that no extension of time is therefore required.

The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to **Deposit Account No. 50-1287**.

Applicant hereby provides a general request for any extension of time, which may be required at any time during the prosecution of the application.

The Commissioner is also authorized to charge any fees which have not been previously paid for by check and which are required during the prosecution of this application to **Deposit Account No. 50-1287**. (Should Deposit Account No. **50-1287** be deficient, please charge any further deficiencies to Deposit Account No. 10-0220.)


Serial No. 10/017,667

Applicants invite the Examiner to contact the undersigned via telephone with any questions or comments regarding this case. **Applicants respectfully request an interview with the Examiner if the Examiner does not believe this amendment places the application in condition for allowance.**

Reconsideration and favorable action are respectfully requested.

Respectfully submitted,

JACOX, MECKSTROTH & JENKINS

By 

Matthew R. Jenkins  
Reg. No. 34,844

2310 Far Hills Building  
Dayton, Ohio 45419-1575  
Telephone 937: 298-2811  
April 14, 2003